The State of Teachers’ Educational Data Use in Thailand
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Introduction
New data occurs daily. Previous studies showed that the data use was still low. For example, Hamilton and colleagues (2009) discovered that teachers collect large volumes of educational data but do not systematically. Moreover, meaningful application toward students’ learning improvement is still deficient. Previous findings concluded that an important obstacle causing teachers to neglect data is usage incapacity (Greenberg & Walsh, 2012; Marsh et al., 2005).

The researcher realizes the aforementioned problem. Furthermore, few studies on educational data use have been conducted in Thailand. Therefore, the present research studied the state and the need of data use of teachers in Thailand to obtain beneficial findings in capacity development planning in educational data use correctly and properly.

The objectives of this study were to study (1) educational data use existing in schools; (2) state of teachers’ educational data use and (3) teachers’ needs in educational data use.

Methods
The study was based on a sequential mixed method design. In stage 1, developing the Research Instrument—qualitative data was collected from qualitative data collection from evidence documents and teacher interview on educational data existing in schools. The interview samples consisted of 6 teachers in two purposively selected schools (one small school and one large school). The research instrument was an informal interview form. Data was analyzed through content analysis.

In stage 2, conducting the survey study quantitative data on state and needs of data use were collected. The samples consisted of 250 teachers from every regions of Thailand. The study was conducted using multi-stage random. The instrument used was a teacher questionnaire on the state of teachers’ data use and teachers’ needs in data use. Data analysis was conducted through descriptive statistics. Modified Priority Need Index $\text{PNI}_{\text{mod}}$ (was used to arrange the teachers’ needs in educational data use in 2 aspects, i.e., (1) knowledge and skill in data use and (2) using data in teaching and improving learners.

Results
Data use existing in schools
There are 11 types of educational data in Thai schools: 1) students’ background data, 2) physical or behavioral flaw data, 3) students’ basic ability data, 4) students’ family data, 5) students’ learning proficiency data, 6) student’s behavior data, 7) students’ life skill data, 8) students’ academic achievement data, 9) school data, 10) teachers’ teaching data and 11) parents and communities’ school-awareness perception data.

State of teachers’ educational data use
According to the 11 types of data, the data existing in most schools was teachers’ teaching data, followed by students’ learning proficiency data and students’ academic achievement data, respectively. Teachers also used such data to improve and develop students as much as possible, whereas physical or behavioral flaws data and life skill data rarely found and infrequently used.

Teachers’ needs in using data
In knowledge and skills in educational data use aspect, teachers had most needs in data analysis. In using data in teaching and improving learners aspect, teachers had most needs in data collection for planning teaching and improving students.

Conclusion
There were 11 types of educational data in Thai schools. The data existing in most schools was teachers’ teaching data, students’ learning proficiency data and students’ academic achievement data. Teachers also used such data to improve and develop students as much as possible. This finding were consistent with a study conducted by Bernhardt (2004) in which the researcher classified the aforementioned these data as student learning data and had stated that the type of student learning data is the most important aspect of the education system.

Teachers had most needs in data analysis and collection to develop knowledge and skill in data use. The finding were also consistent with a study done by Greenberg and Walsh (2012) on research conducted in the past ten years revealed that key weaknesses of teachers were the data analysis and the inability to apply data obtained from student assessment in decision-making.

References